User Manual

BTGP38-Plus Bluetooth GPS Receiver

Ver3.1

1 BTGP38-Plus at a glance

1.1 Appearance and Function

Power button

Bluetooth status Led
GPS Status Led

Power jack

Charge Led

1.2 Accessories

Bluetooth GPS Receiver   Battery   User Manual   AC Power Charger   DC Car Power Charger

2. Introduction

The BTGP38-Plus is a GPS receiver with Bluetooth interface and built-in antenna for high sensitivity to track signal. Based on the SiRF star III Low power consumption chipset and supports all functions (Single Sat updates in reduced visibility, Superior urban canyon performance, Foliage Lock for weak signal tracking, etc.). The BTGP38-Plus is well suited to system integrations including PDA, Smart phone, Tablet PC and Notebook PC with Bluetooth devices. It satisfies a wide variety of applications that are purposes in automotive and outdoor recreation navigation systems.

2.1 Package

Before you start up, make sure that your package includes following items. If any item is missing or damaged, please contact your dealer immediately.

Bluetooth GPS Receiver
User Manual
AC Power Charger
DC Car Power Charger
Battery

2.2 Power Jack

The power jack lets you connect either a DC car power charger (included) or AC

power charger (included) to recharge the internal battery. Please note that the adapter rating is 5V, 1.2 A, positive pole center.

2.3 LED Function Bluetooth Status LED (Blue):

Blinking (Quickly) ---- Not connected to any Bluetooth device.

Blinking (Slowly) ----Connected to other Bluetooth device.

GPS Status LED (Green):

Blinking ---- GPS position is fixed

Steady light ---- GPS position is not fixed

Battery Status LED (Red/Yellow):

Red ---- Battery is charging now.

LED off ---- Battery is fully charged during charging.

2.4 Power-saving Function

When you start the power of the Bluetooth GPS Receiver BTGP38-Plus, if the Bluetooth is not connected to any devices within 10 minutes, BTGP38-Plus will turn off the power automatically, and all the LED will go off simultaneously.

3. Specification

3.1 System Specification

Electrical Characteristics (Receiver)

Frequency	L1, 1.57542 MHz
C/A Code	1.023 MHz chip rate
Channels	20 all-in view tracking -159 dBm

Accuracy

Position Horizontal	10m 2D RMS (SA off)
WAAS enabled	5m 2D RMS (SA OFF)
Time	1 micro-second synchronized to GPS time
Velocity	0.1m/sec 95 %(SA off)

Datum

Datum	WGS-84

Acquisition Rate

Hot start	1 sec., average (with ephemeris and almanac valid)
Warm start	38 sec., average (with almanac but not ephemeris)

Cold start   **42 sec., average (neither almanac nor ephemeris)**
Reacquisition   **0.1 sec, average (interruption recovery time)**

Protocol

GPS Output Data   **NMEA 0183 protocol, and supports command GGA (1sec), GSA (1 sec), GSV (5 sec), RMC (1sec)(VTG and GLL are optional)**

GPS transfer rate   **9600,N, 8 , 1**

Dynamic Condition

Acceleration Limit   **Less than 4G**
Altitude Limit   **18,000 meters (60,000 feet) max**
Velocity Limit   **515 meters/sec. (1,000 knots)max**
Jerk Limit   **20m/sec**3**

Power

Voltage   **Built-in rechargeable battery(750 mAh) and 5V DCinput Charging circuit**

Operation Time   **15 hr. After fully recharged, in continuous mode >20 hr in Trickling power mode**

Physical Characteristics

Dimension   **72.5mm x 40.4mm x 26mm**
Weight   **70 g**

Temperature

Operating   **-20° ~60° C**
Storage   **-30°~ 80°C**
Humidity   **Up to 95% non-condensing**

3.2 Bluetooth Specification

● **Bluetooth V2.0+EDR Compliant**

● **Supply Voltage:**   **2.8V ~ 3.3V**

● **Frequency Range:**   **2.402 ~ 2.480 GHz**

● **Receiver Sensitivity:**   **-80 dBm**

● **Transmit Power:**   **Class 2**

● **Transmitting Range:**   **10 m (Depends on environment)**

● **Power Consumption:**   **30 mA (Typical)**

4. Usage

4.1. For PDA with built-in Bluetooth

1. Turn on the power switch in BTGP38-Plus

2. Please refer to the user manual of PDA and make the Bluetooth of PDA connect   to the BTGP38-Plus. Some PDAs may need the Bluetooth passkey, the passkey is "0000".

3. Check the number of COM port used by Bluetooth.

4. Run the suitable mapping/navigation software and select the correct COM port & baud rate: 9600

4.2. For PDA with Bluetooth Compact Flash card

1. Turn on the power switch in BTGP38-Plus

2. Please refer to the user manual of Bluetooth Compact Flash card to make   it connect to the BTGP38-Plus. Some Bluetooth devices may need the Bluetooth passkey, the passkey is "0000".

3. Check the number of COM port used by Bluetooth.(Example COM 6).

4. Running the suitable mapping/navigation software and select the correct COM port & baud rate :9600

4.3. For Notebook with Bluetooth device

1. Turn on the power switch in BTGP38-Plus

2. Please refer to the user manual of Bluetooth device and make it connect to the BTGP38-Plus. Some Bluetooth devices may need The Bluetooth passkey, the passkey is "0000".

3. Check the number of COM port used by Bluetooth.(Example COM 6).

4. Running the suitable mapping/navigation software and select the correct COM port & baud rate: 9600

Note: The Bluetooth device in most of the applications have an "auto-detect" feature that you do not need to select the Baud Rate.

5. How to test your Bluetooth GPS Receiver?

The testing program supports the Microsoft Windows XP of PC platform.

1. Run the "LSView.exe" to execute the installation procedure of testing program (via PC and ActiveSync). Here is the description of "LSView" testing program :
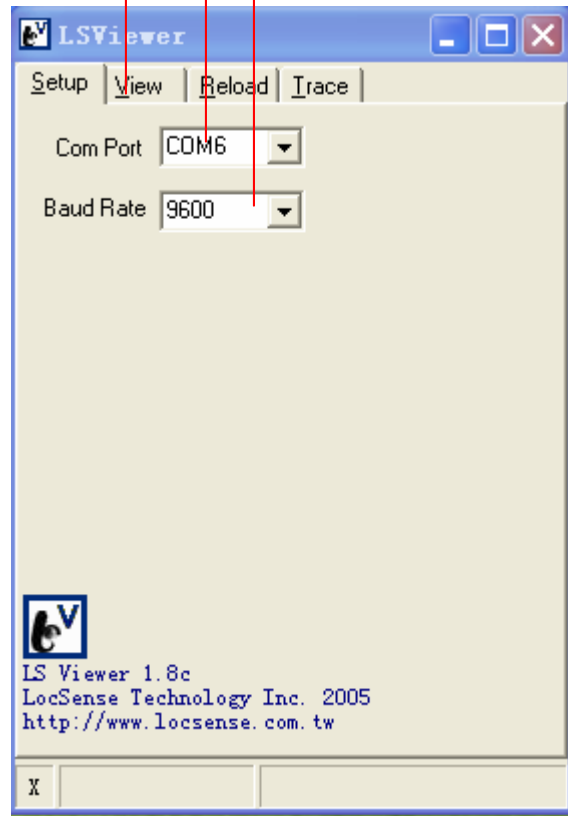**User must select COM port , Baud Rate (9600) ,click the [View] button to see the receiving GPS data.**
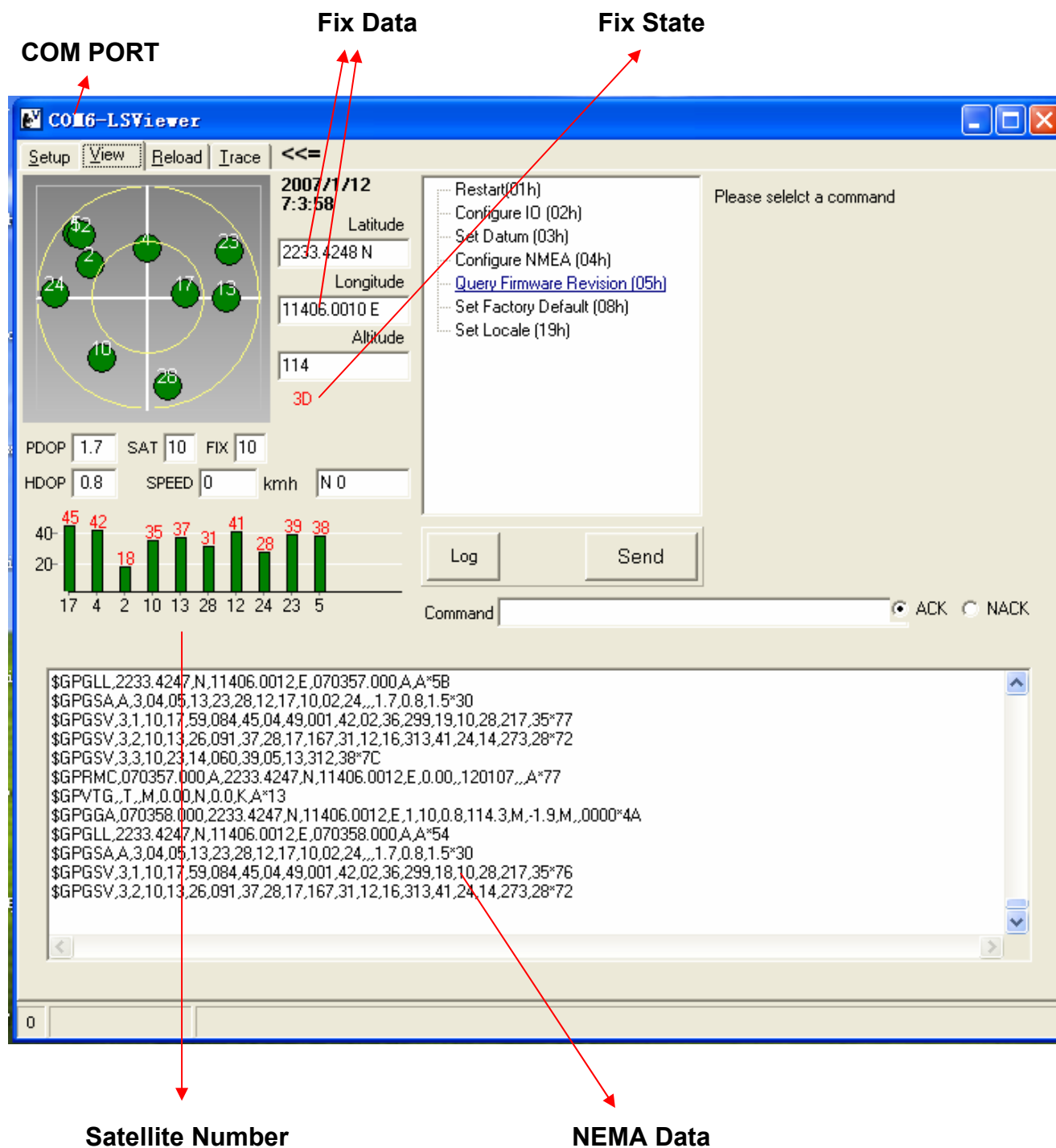**Note: The Bluetooth device in most of the applications have an " auto-detect" feature that you do not need to the Baud Rate.**

View Mode

COM Port Select

Baud Rate Select

COM PORT

Fix Data

Fix State

Satellite Number

NEMA Data

Trouble shooting Bluetooth is unable to connect

A) Check if the GPS Bluetooth indicator is flashing normally. That is, flash three times per second means the product is under standby mode; flash once per second means Bluetooth has been online already.

B) Check if energy level is sufficient. If red LED is light up, then the battery level is insufficient,

GPS cannot be positioned

A) Check whether GPS indicator operates normally or not. If the indicator is constantly light up, it means that GPS is not in operation; if the indicator is flashing, it means GPS is already positioned.

B) If GPS cannot be positioned for long, please turn off the power switch for 3 seconds, then turn on it. And check the GPS whether in strong magnetic field or by large electricity device (for example, the electromotor, transformer substation).

C) To check if power lever is sufficient, if the red LED lights up, it means the power is insufficient, pls. recharge until the red indicator is off(recharging is finished).

D) If the device still can not be positioned with sufficient battery power, pls. move it to the open area and try.

F) PLS. DO NOT OPEN THE EQUIPMENT BY YOURSELF, YOU HAVE TO CONTACT YOUR LOCAL DEALER FOR SUPPORT.

FCC Notices

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1)This device may not cause harmful interference, and

(2)This device must accept any interference received, including interference that may cause undesired operation .

FCC RF Exposure requirements:

This device and its antenna(s) must not be co-located or operation in conjunction with any other antenna or transmitter.

NOTE

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.